

4.15 ENVIRONMENTAL JUSTICE

On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House, 1994). The order requires the U.S. Environmental Protection Agency (EPA) and all other federal agencies (as well as State agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

In 1997, the U.S. EPA’s Office of Environmental Justice released the Environmental Justice Implementation Plan, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA’s Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analysis in 1998. This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many State agencies have utilized the EPA’s Environmental Justice Implementation Plan as a basis for the development of their own environmental justice strategies and policies, as of yet the majority of California State agencies do not have guidance for incorporation of environmental justice impact assessment into CEQA analysis. The State Air Resources Board has, for example, examined this issue and has received advice from legal counsel, by a memorandum entitled “CEQA and Environmental Justice”. This memorandum states, in part, “For the reasons set forth below, we would conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the Air Resources Board (ARB), the air pollution control districts, and general purpose land use agencies) undertakes or permits a project or activity that may have a significant adverse impact on the physical environment. All public agencies in California are currently obliged to comply with CEQA, and no further legislation would be needed to include an environmental justice analysis in the CEQA documents prepared for the discretionary actions public agencies undertake”.

Under AB 1553, signed into law in October 2001, the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. Currently, the OPR is in the process of updating the General Plan Guidelines to incorporate the requirements of AB 1553.

California State Lands Commission Policy

The CSLC has developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities." The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations. This discussion is provided in this document consistent with and in furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities (CSLC 2002).

Regional and local environmental justice assessments have been performed by agencies within the study area, such as the Draft Environmental Justice Policies and Procedures that has been created by the Kern Coalition of Governments (COG). This document is specific to transportation planning and uses the Census 2000 to identify minority, low-income, aged, and transit-disabled communities in Traffic Analysis Zones in Kern County.

This section analyzes the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the proposed and alternative pipeline corridors. This analysis focuses, in the main, on whether the proposed Project's impacts have the potential to affect area(s) of high-minority population(s) and low-income communities disproportionately and, thus create an adverse environmental justice impact.

The environmental justice evaluation of the Project has been completed by answering the following three questions sequentially:

- (1) Would the Project cause high or adverse public health or environmental impacts on the public?
- (2) Do minority or low-income populations exist within the potential impact area of the proposed Project?
- (3) If there are any high or adverse Project impacts, would they disproportionately affect minority or low-income populations?

4.15.1 Environmental Setting

The All American Pipeline was originally built in 1988. Since its construction, the demographics of the counties through which it passes (Kern, San Bernardino, Riverside, and La Paz) have changed, with the development of residential and mobile home communities near and around the pipeline. Tables 4.15-1 and 4.15-2 provide a summary of Census 2000 data on the racial diversity and income levels of people in the State of California and in the three California counties crossed by the Project. On average, Kern, San Bernardino, and Riverside Counties contain minority populations similar to that found, on average, throughout the State. When compared to the State averages, all three counties have higher than average Hispanic or Latino communities and lower than average Asian populations. Additionally, Kern and San Bernardino Counties had significantly lower annual per capita income levels and higher poverty levels than State averages. La Paz County has a higher population of Native Americans than Kern, Riverside and San Bernardino Counties. Identification of communities of concern was based, as discussed in Section 4.15.3, Significance Criteria, on demographics at the census tract level.

Table 4.15-1. Summary of Census 2000 Demographics for Region

County	Total Population	Percent Minority	Annual per Capita Income	Percent Below Poverty Level	Percent Age 65 or Above
La Paz County	19,715	25.9	14,916	19.6	25.8
Kern County	661,645	38.4	\$15,760	20.8	9.4
Riverside County	1,545,387	34.4	\$18,689	14.2	12.7
San Bernardino County	1,709,434	41.1	\$16,856	15.8	8.6
Total for California	33,871,648	40.5	\$22,711	14.2	10.6

Source: US Census Bureau, Census 2000.

Table 4.15-2. Summary of Census 2000 Race and Ethnicity Demographics for Region

County	Total Population	% White	% Black or African American	% American Indian & Alaska Native	% Asian	% Native Hawaiian & Other Pacific Islander	% Some Other Race	% Two or More Races	% Hispanic or Latino (of Any Race)	% Minority
La Paz County	19,715	63.8	0.8	12.5	0.4	0.1	9.3	2.7	22.4	36.2
Kern County	661,645	61.6	6.0	1.5	3.4	0.1	23.2	4.1	38.4	38.4
San Bernardino County	1,709,434	58.9	9.1	1.2	4.7	0.3	20.8	5.0	39.2	41.1
Riverside County	1,545,387	65.6	6.2	1.2	3.7	0.3	18.7	4.4	36.2	34.4
State of California	33,871,648	59.5	6.7	1.0	10.9	0.3	16.8	4.7	32.4	40.5

Source: US Census Bureau, Census 2000

4.15.2 Regulatory Setting

Federal

EO 12898 issued on February 11, 1994 (EPA 1994), requires the EPA and all other Federal agencies (as well as State agencies receiving Federal funds) to identify and address any disproportionately high adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

In 1997, the EPA's Office of Environmental Justice released the Environmental Justice Implementation Plan (EPA 1997), supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing EO 12898. In 1998, EPA developed a framework for the assessment of environmental justice in the preparation of environmental impact statements and environmental assessments under the NEPA. This document, the Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis (EPA 1998), emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

State

The CSLC has developed an environmental justice policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities" (CSLC 2002).

The CSLC relies on the CEQA process to identify relevant low income and minority populations that could be adversely and disproportionately affected by CSLC-reviewed projects or programs, to encourage participation of these populations, and to address potential impacts on such populations.

Regional and Local

In some parts of California, Metropolitan Transportation Agencies and Councils of Governments (COGs) have developed environmental justice policies in response to

EO 12898, the 1990 Americans with Disabilities Act, the 1990 Clean Air Act Amendments, and the Intermodal Surface Transportation Efficiency Act of 1991. San Bernardino, Riverside, Kern, and La Paz Counties all have policies to consider human health and environmental conditions in minority or low-income areas in their districts, but do not have specific guidelines for environmental justice analysis.

The Kern COG is in the process of developing Draft Environmental Justice Policies and Procedures (Kern County 2003) that provide elected officials and COG staff guidance in providing for environmental justice and interagency consultation in the regional planning process. This document is specific to transportation planning and uses the Census 2000 to identify minority, low-income, aged, and transit-disabled communities in Traffic Analysis Zones in Kern County.

4.15.3 Significance Criteria

According to EO 12898 and CSLC policy (CSLC 2002, 2003), an environmental justice impact would be considered significant and would require mitigation if Project construction or operation would cause any minority or low-income population to bear a disproportionate share of an adverse impact.

4.15.4 Impact Analysis and Mitigation

As discussed in Section 4.6, Hazards and Public Safety, construction and operation of the Project has the potential to affect minority and low-income populations within an impact area of 525 to 675 feet of the pipeline, depending on the location on the pipeline. This potential impact area encompasses not only any construction-related impacts on populations near the pipeline but is also the distance at which members of the public have a potential to be affected in the unlikely event of a rupture and explosion on the natural gas pipeline.

Potentially Affected Populations

The remainder of this section analyzes potential impacts on minority and low-income populations within the potential impact area of the Project (all areas within 525 to 675 feet of the Project area). Evaluation of these populations is based on US Bureau of the Census, Census 2000 data. The potential impact area of the Project crosses 21 census tracts, including eight tracts in Kern County (MP 0 to MP 86), nine tracts in San Bernardino County (MP 86 to MP 261.5), three tracts in Riverside County

(MP 261.5 to MP 303.0), and one tract in La Paz County (MP 303.0 to MP 303.5). According to census data, these 21 tracts include a total population of 110,827 persons.

Potential environmental justice areas of concern within the potential Project impact area were identified by comparing average minority and low-income population percentages within tracts in the potential Project impact area to threshold values. These threshold values were calculated by multiplying the county average for which the tract is located by 1.2. This methodology is consistent with that proposed by EPA Region 4 Interim Policy to Identify and Address Potential Environmental Justice Areas

Low-Income Populations

Table 4.15-3 shows the populations below poverty level and the average per capita income in the tracts in the potential impact area of the Project. The twenty-one tracts crossed by the Project had an average per capita income of \$16,329, which is slightly lower than the average of \$16,555 for the four counties crossed by the Project. Additionally, the percent of population below poverty level in the potentially affected tracts (19.3 percent) is higher than average for the four counties (17.6 percent).

Table 4.15-3. Low-Income Populations in Potential Project Impact Area

Tracts in Potential Impact Area	Total Population	Population Below Poverty Level	Percent Below Poverty Level	Per Capita Income	Number of Residential Buildings within Potential Impact Area ¹	Contains Significant Low-Income Populations Potentially in Project Impact Area ²
La Paz County	19,715	3,864	19.6	\$14,916		
Tract 206	1,540	650	42.2	\$14,508	0	No
Kern County	661,645	137,622	20.8	\$15,760		
Tract 33.02	7,051	817	11.62	\$19,322	0	No
Tract 33.04	5,521	356	13.06	\$18,887	9	No
Tract 55.03	2,509	341	13.01	\$18,343	0	No
Tract 56	2,025	401	19.70	\$18,294	0	No
Tract 57	6,577	169	2.81	\$13,358	27	No
Tract 59	3,284	1,201	37.18	\$11,856	2	Yes
Tract 60.05	11,596	1,011	8.73	\$23,040	237	No
Tract 62.02	1,810	481	26.95	\$21,351	3	Yes
Riverside County	1,545,387	270,091	14.2	\$18,689		
Tract 458	11,127	503	21.45	\$7,352	2	Yes
Tract 459	1,951	474	24.57	\$13,317	0	No
Tract 460	1,613	313	19.48	\$20,584	8	Yes
San Bernardino County	1,709,434	219,445	15.8	\$16,856		
Tract 103	13,617	1,067	9.0	\$13,694	25	No
Tract 116	6,151	718	12.0	\$20,131	8	No
Tract 105	709	162	23.0	\$14,926	0	No
Tract 119	3,644	447	12.0	\$15,995	27	No
Tract 93	1,284	171	13.0	\$16,330	178	No
Tract 94	3,040	1,221	42.0	\$11,760	0	No
Tract 120	11,690	1,658	15.0	\$16,855	0	No
Tract 121	11,241	1,979	18.0	\$18,297	3	No
Tract 104.09	2,847	643	23.0	\$14,307	7	Yes

¹Potential Project impact area away from the centerline of Line 1903 is 525 feet from MP 0 to MP 132, 630 feet from MP 132 to MP 215.75, 675 feet from MP 215.75 to MP 247.6, 630 feet from MP 247.6 to MP 303.5. On the 6.4 Cadiz Lateral, the potential impact area is 675 feet on either side of the pipeline.

²Tracts with potentially significant low-income populations are those tracts with populations with annual per capita income below 0.8 times the average for the county in which the tract is located or populations with a percentage of persons below poverty level above 1.2 times the county average. Additionally, a potentially significant low-income area must contain residential buildings within the potential Project impact area.

Source: US Census Bureau, Census 2000, PCT 49 1999.

Nine of 21 tracts in the potential impact area contain populations below the poverty level that exceed averages for the county in which they are located. Five of these nine tracts also show a lower average per capita income than county averages. Five of the tracts identified to contain low-income communities are known to contain residential buildings within the potential impact area of the Project (Figure 4.15-1). These residences are located in five block groups within these tracts.

Minority Populations

Table 4.15-4 shows the relative minority populations based on the 21 tracts in the potential impact area of the Project, as well as the average minority populations for San Bernardino, Riverside, Kern, and La Paz Counties. On average, these 21 tracts have a 29 percent minority population, compared to an average of 35 percent for the four counties crossed by the Project.

Table 4.15-4. Minority Populations in Potential Project Impact Area

Tracts in Potential Impact Area	Total Population	Minority Population	Percent Minority	Number of Residential Buildings within Potential Impact Area ¹	Contains Significant Minority Populations Potentially in Project Impact Area ²
La Paz County	19,715	7,142	36.2	0	
Tract 206	1,540	277	18.0	0	No
Kern County	661,645	254,064	38.4	0	
Tract 33.02	7,051	980	13.9	0	No
Tract 33.04	5,521	1,518	27.5	9	No
Tract 55.03	2,509	409	16.3	0	No
Tract 56	2,025	304	15.0	0	No
Tract 57	6,577	1,848	28.1	27	No
Tract 59	3,284	1,133	34.5	2	No
Tract 60.05	11,596	1,380	11.9	237	No
Tract 62.02	1,810	746	41.2	3	No
Riverside County	1,545,387	531,900	34.4	0	
Tract 458	11,127	7,578	68.1	2	Yes
Tract 459	1,951	953	48.8	0	No
Tract 460	1,613	366	22.7	8	No
San Bernardino County	1,709,434	702,474	41.1	0	
Tract 103	13,617	4,950	36.4	1	No
Tract 116	6,151	894	14.5	10	No
Tract 105	709	253	35.7	0	No
Tract 119	3,644	811	22.3	27	No
Tract 93	1,284	373	29.0	178	No
Tract 94	3,040	1,670	54.9	0	No
Tract 120	11,690	5,120	43.8	0	No
Tract 121	11,241	2,094	18.6	3	No
Tract 104.09	2,847	458	16.1	7	No

¹Potential Project impact area away from the centerline of Line 1903 is 525 feet from MP 0 to MP 132, 630 feet from MP 132 to MP 215.75, 675 feet from MP 215.75 to MP 247.6, 630 feet from MP 247.6 to MP 303.5. On the 6.4 Cadiz Lateral, the potential impact area is 675 feet on either side of the pipeline.

²Tracts with potentially significant minority populations are those tracts with minority populations above 1.2 times the average for the county in which the tract is located and residential buildings within the potential Project impact area.

Source: US Census Bureau, Census 2000, GCT PL 2000.

Three of 21 tracts in the potential impact area contain minority percentages exceeding averages for the county in which they are located. These three tracts contain relatively large Hispanic and/or African American populations. Aerial photos were analyzed to determine whether residential buildings or residential development projects are present within the potential impact area of the Project. Residences are not currently present within the Project impact area in all but one of the three tracts identified to contain high

minority populations within the Project impact area (Figure 4.15-2). Residences are present within the potential impact area of the Project in Tract 458 in Riverside County, which contains significant Hispanic and African American populations. The two residences present in this tract are located in Block Group 4. Block groups are smaller statistical units encompassing smaller areas within a tract. Within Block Group 4, 7.83 percent of the total population is minority. This is not considered a significant minority community as the averages for Riverside County and the State of California are 34.4 percent and 40.5 percent respectively. Therefore, no residences within the impact area of the Project are located in areas with significant minority populations.

In addition to those communities identified by the US Census Bureau and discussed in this section, minority populations could have been underestimated by the Census in the potential Project impact area. In California, this can be particularly true for areas with large populations of migratory workers associated with large agriculture operations, particularly orchards. It is unlikely that such populations exist within the Project area as only 8.5 acres of land affected by the Project is cultivated cropland. This area is concentrated near Blythe, California and constitutes only 6.2 percent of the total area potentially affected by the Project. This cropland was observed in November 2003 and no orchards were observed on the land. Additionally, there was no evidence of minority workers temporarily residing in the Project impact area.

Identification of Disproportionately High and Adverse Environmental Effects

When determining whether environmental effects disproportionately impact relevant populations, the following factors are considered to the extent practicable:

- whether there is or would be an impact on the natural or physical environment that significantly and adversely affects the identified minority, or low-income population. Such effects may include ecological, cultural, human health, economic, or social impacts on the identified communities when those impacts are interrelated to impacts on the natural or physical environment.
- whether environmental effects are significant and would result in an adverse impact on the identified population that appreciably exceeds or is likely to appreciably exceed that impact on the general population or other appropriate comparison group.

- whether the environmental effects occur or would occur in the identified minority population that is affected by cumulative or multiple adverse exposures from environmental hazards.

Potential environmental effects that could result from the Project are addressed in Sections 4.1 to 4.14 of this environmental analysis. The only significant construction-related impacts after mitigation expected for the Project, after mitigation, (Class I impacts) affect biological resources as described in Section 4.1, Biological Resources. These impacts are not expected to directly affect human populations in the Project area. Therefore, no adverse construction-related impacts are expected to disproportionately affect any minority or low-income populations in the Project area after mitigation proposed in Sections 4.1 to 4.14.

Section 4.6, Hazards and Public Safety, specifically evaluates any risks the Project may pose to the safety and health of the public. As discussed in this section, risk of pipeline upset or explosion would be significantly reduced by compliance with USDOT regulations on pipeline construction and operating pressures. The Project also would be subject to more frequent wall-thickness testing (smart pig analysis) than required by USDOT regulations and a revised operation and maintenance plan in Mitigation Condition HAZ-1.

Despite these measures, it is still possible that upset or explosion of the pipeline could occur. As discussed in Section 4.6, Hazards and Public Safety, this impact on public safety is considered significant after mitigation (Class I impact).

Approximately 536 residences are located within the potential impact area of the Project. None of these residences are in tracts or block groups with significant minority populations. Twelve of the 536 residences (2.2 percent) are located in block groups with significant low-income populations. This represents a relatively small portion of residences potentially impacted by the Project.

Additionally, the majority of Line 1903 and all of the Cadiz Lateral is located in rangeland and rural areas of very low population density. Section 4.6, Hazards and Public Safety, describes the DOT class designations within the Project impact area. These class designations are based on population density, with Class I the least dense and Class 4 the most dense. As described in Section 4.6, Hazards and Public Safety, Line 1903 and the Cadiz Lateral is located in all Class I areas, with the exception of five

Class 2 areas and one Class 3 area. No significant minority or low-income communities are located within the impact area of the Project in Class 2 and 3 areas. All significant low-income communities potentially impacted by the Project are located in low-density 1I areas. Minority and low-income communities within the potential impact area of the Project would not be disproportionately impacted by a potential upset or explosion on Line 1903 or the Cadiz Lateral. Project impacts to minority and low-income populations would be less than significant (Class III).

4.15.5 Cumulative Impacts

In addition to the proposed Project, other projects may contribute to cumulative impacts on public safety in the vicinity of the Project. The projects under construction and potentially contributing to cumulative impacts in the vicinity of the Project are discussed in Section 5.5, Summary of Cumulative Impacts.

Line 1903 would connect with existing natural gas infrastructure at Wheeler Ridge, Daggett, Amboy, Ehrenberg, and in the vicinity of Cadiz. Line 1903 would tie-in with the existing Mojave Pipeline at Amboy, the Mojave/Kern Common Facilities at Daggett, the SoCalGas system at Wheeler Ridge, and Line 2000 at Ehrenberg. Additionally, several smaller natural gas pipelines associated with local systems are located within 500 feet of Line 1903. Each of these gas pipelines have the potential for a release of natural gas, and associated explosion of fire. However, as discussed for the Project, the impacts do not disproportionately affect minority or low-income populations, and are less than significant.

4.15.6 Alternatives

No Project Alternative

The No Project Alternative would not convert the former All American crude oil pipeline system to a natural gas transmission system. No potential impacts to the public, including minority and low-income populations, would occur from any threats of rupture or explosions on Line 1903 or the Cadiz Lateral.

Ehrenberg to Daggett Alternative

The Ehrenberg to Daggett Alternative would not convert the portion of Line 1903 from MP 0 to MP 132.1. There is a potential for rupture of the pipeline on any portion of the

pipeline. Therefore, the Ehrenberg to Daggett alternative still poses a risk to the public. Under this alternative, only 42 residences would be within the potential impact area of a pipeline rupture for that portion of the Project included in the alternative. This alternative would reduce the number of residences potentially affected from 536 for the proposed Project to 42 for this alternative. The Ehrenberg to Daggett Alternative would, therefore, reduce the likelihood of impacts on the public (and related to environmental justice) as it would significantly reduce the number of residences potentially affected by the Project.

No significant low-income populations exist in block groups and tracts with residences within the potential impact area of the Alternative. One block group that contains residences in the potential impact area of the alternative has significant low-income populations (San Bernardino County Tract 104.09, Block Group 3). Only seven residences are located in the potential impact area of the alternative in the block group. When compared to the proposed Project, the alternative reduces the number of potentially impacted residences in low-income areas from twelve to seven. These seven residences are located in low-density Class I areas. The significantly low number and density of residences in the impact area of the alternative make it unlikely for low-income populations to be significantly disproportionately affected by the alternative. Potential impacts related to environmental justice under the Ehrenberg to Daggett Alternative would be less than significant.

Ehrenberg to Cadiz Alternative

The Ehrenberg to Cadiz Alternative would not convert the portion of Line 1903 from MP 0 to MP 215.75. There is a potential for rupture of the pipeline on any portion of the pipeline. Therefore, the Ehrenberg to Cadiz alternative still poses a risk to the public. Under this alternative, 17 residences would be within the potential impact area of a pipeline rupture for that portion of the Project included in the alternative. This alternative would reduce the number of residences potentially affected from 536 for the proposed Project to 17 for this alternative. The Ehrenberg to Cadiz Alternative would, therefore, reduce the likelihood of impacts on the public (and related to environmental justice) as it would significantly reduce the number of residences potentially affected by the Project.

No significant low-income populations exist in block groups and tracts with residences within the potential impact area of the Alternative. One block group that contains

residences in the potential impact area of the alternative has significant low-income populations (San Bernardino County Tract 104.09, Block Group 3). Only seven residences are located in the potential impact area of the alternative in the block group. When compared to the proposed Project, the alternative reduces the number of potentially impacted residences in low-income areas from twelve to seven. These seven residences are located in low-density Class 1 areas. The significantly low number and density of residences in the impact area of the alternative make it unlikely for low-income populations to be significantly disproportionately affected by the alternative. Potential impacts related to environmental justice under the Ehrenberg to Cadiz Alternative would be less than significant.

4.15.7 References

California State Lands Commission. October 1, 2002. Environmental Justice Policy Statement.

California State Lands Commission. February 6, 2003. Guidance Document. Addressing Environmental Justice Issues within the Context of the CEQA Process.

Executive Order 12898. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations with Accompanying Memorandum. February 11, 1994.

US Census Bureau. Census 2000.

US Environmental Protection Agency (EPA). April 1998. Final Guidance for Incorporating Environmental Justice Concerns in USEPA's NEPA Compliance Analysis.

US Environmental Protection Agency (EPA) Region 4 April 1999. Interim Policy to Identify and Address Potential Environmental Justice Areas. USEPA-904-R-99-004.